

ABSTRACT OF THE DISCLOSURE

The present invention concerns a battery monitoring system for monitoring a plurality of batteries serially connected to form a string. The battery monitoring system includes a number of probes connected to at least a portion of the string, a daisy chain bus having a select channel for serially interconnecting the probes, the bus having other, parallel channels for data communication and power, and a system server. The probes each have a sensing module and a communication module. The sensing module senses characteristics of at least a portion of the string, such as voltage or current. The communication module receives the sensed characteristics and converts them into digital form for broadcast to the system server over the bus. The communication module of the probes have a memory for storing an address assigned to the corresponding probe upon reception of an initialization signal sent by the system server via the bus. In order to readdress all of the probes, a reset signal is transmitted to all of the probes. The probes clear the present address, and wait until they are selected through the select channel. Once the probe has been selected, it receives an address from the system server, stores the address in its memory, acknowledges this to the system controller, and sends a signal on the select channel to the next probe. Accordingly, initialization of a battery monitoring system is easily performed. The invention also lies in an interface device for use with a battery monitoring system.